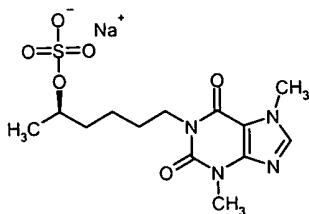


29. (New) The compound of claim 21, wherein the compound is



or a pharmaceutical acceptable salt or solvate thereof.

### REMARKS

Reexamination and reconsideration in light of the foregoing amendment and the following remarks is respectfully requested.

Claims 1-7 and 10-29 are pending in this application. Claims 8 and 9 have been canceled. Claims 1, 3, 4, 10, 11 and 16 have been amended. A marked up version of the changes to these claims appears in the APPENDIX attached hereto. New claims 22-29 have been added. No new matter has been introduced into the application by the amendments. Support for the amendments can be found in Table 1 on pages 26-76 of the specification.

Applicants appreciate the Examiner's consideration of the art cited in the Information Disclosure Statement filed as acknowledged in the Office Action Summary. Also included with this response is an Information Disclosure Statement citing European Patent No. 0 389 282.

The Examiner indicated that the species elected was the compound of formula (I) where X is N(R<sub>3</sub>), Y is N, Z is C(R<sub>3</sub>), R<sub>1</sub> is C<sub>(5-9)</sub> hydroxyalkyl and R<sub>2</sub> is CH<sub>3</sub>. This is not the election of record. In a paper filed September 6, 2001, Applicants elected species where X and Y are N and Z is C. In other words, the election was that the atoms in the ring at positions X and Y are each nitrogen and the atom at the position Z in the ring a carbon. Based on this election X could be N(R)

and Z could be C(R). There was no election limiting R<sub>1</sub> and R<sub>2</sub>. Clarification of the election is requested.

Claims 1-8 and 10-21 stand rejected on non-statutory grounds "as being improper Markush claims." In particular, the Examiner questions the breadth of the definitions of X, Y, Z and R<sub>1</sub> variables. The Examiner indicates that limiting the claims to the elected species, i.e., X and Y being N, Z as being C(R<sub>3</sub>), and R<sub>1</sub> as being a substituted or unsubstituted C<sub>(5-9)</sub> hydroxyalkyl would overcome the rejection. It is Applicants' position that the Examiner's characterization of the election is in error as set forth in the preceding paragraph. Also, this rejection lacks a statutory basis. However, in an effort to advance prosecution, Applicants' have amended the claims to limit them to the species as elected in the paper filed on September 6, 2001. Applicants reserve the right to file a divisional application on the non-elected species.

The claims, presumably all of the claims, stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite because the proviso clause refers to R<sub>1</sub> and being a C<sub>(1-8)</sub> when there is only support for C<sub>(5-9)</sub>. The proviso clause has been amended to delete "C<sub>(1-8)</sub>" thereby rendering the rejection moot.

The Examiner has also objected to the position in the claim of the phrase "including resolved enantiomers, diastereomers, tautomers, salts and solvates thereof". The Examiner is of the opinion that it should be at the end of the claim, and not contain the term "including." The position of the objected to phrase does not render the claim indefinite. A claim with similar language was allowed in U.S. Patent No. 6,103,730. Accordingly, it is respectfully requested that the Examiner reconsider this objection.

Finally, the Examiner finds claim 9 to be indefinite because of it refers to Table 1 in the specification. In order to overcome this rejection, the claim has been canceled thereby rendering the rejection moot.

Claims 1-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hintz (U.S. Patent No. 4,515,795). According to the Examiner, the "R<sub>1</sub> containing compounds include the simple alkyl homologs and position isomers of these prior art compounds" and that "[f]urther when the present compounds when R<sub>3</sub> is 4-8 [sic] alkyl are simple homologs of the provisoed compounds." The Examiner concludes that "[o]ne would be motivated to prepare simple homologs and/or isomer of the reference compounds with the reasonable expectation of obtaining additional compounds for uses in of [sic] the reference compounds." In order to advance prosecution, the proviso has been amended to further clarify the exclusion of the exclude the  $\omega$ -1-hydroxyalkyl compound disclosed in Hintz. The reference does not disclose or suggest any compound having an R<sub>1</sub> being a  $\omega$ -1-hydroxyalkyl group while at the same time providing an R<sub>3</sub> group other than hydrogen or a simple alkyl and R<sub>4</sub> group other than hydrogen.

For the foregoing reasons, the Examiner has not established a *prima facie* case of obviousness. It is respectfully requested that the rejection be reconsidered and withdrawn.

New claims 22-29 have been added. Claims 22-25 are dependent on claim 1 and include the proviso of claim 1 thereby excluding the compounds of Hintz et al. As for claims 26-29, these claims are dependent on claim 21 and are directed to specific compounds, which are not suggested or disclosed by Hintz et al.

It is submitted that the claims 1-7 and 10-29 are comply with the requirements of 35 U.S.C. § 112 and that the claims are over the teachings of Hintz et al. Accordingly, favorable

Application No. 09/288,556

reconsideration of the claims is requested in light of the preceding amendments and remarks.

Allowance of the claims is courteously solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT, WILL & EMERY

A handwritten signature in black ink, appearing to read "Cameron K. Weiffenbach", with a long horizontal flourish extending to the right.

Cameron K. Weiffenbach  
Registration No. 44,488

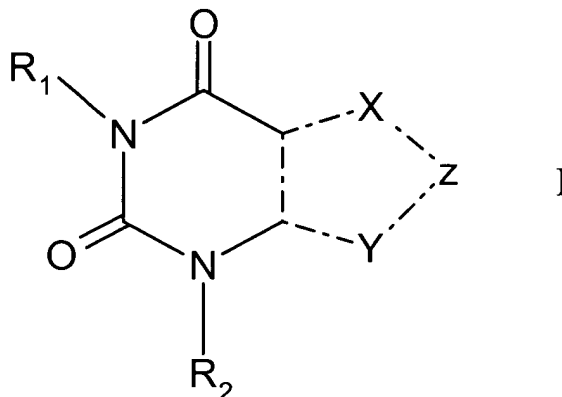
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**Date: December 16, 2002**

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

*Please amend claims 1, 3, 4, 10, 11, 16 and 21 as follows:*

1. (Three Times Amended) A therapeutic compound, including resolved enantiomers, diastereomers, tautomers, salts and solvates thereof, having the following formula:



wherein:

[X, Y and Z are independently selected from a member of the group consisting of C(R<sub>3</sub>), N, N(R<sub>3</sub>) and S] X and Y are N or N(R<sub>3</sub>);

Z is C(R<sub>4</sub>);

R<sub>1</sub> is selected from a member of the group consisting of hydrogen, methyl, C<sub>(5-9)</sub>alkyl, C<sub>(5-9)</sub>alkenyl, C<sub>(5-9)</sub>alkynyl, C<sub>(5-9)</sub>hydroxyalkyl, C<sub>(3-8)</sub>alkoxyl, C<sub>(5-9)</sub>alkoxyalkyl, the R<sub>1</sub> being optionally substituted;

R<sub>2</sub>, [and] R<sub>3</sub> and R<sub>4</sub> are independently selected from a member of the group consisting of hydrogen, halo, oxo, C<sub>(1-20)</sub>alkyl, C<sub>(1-20)</sub>hydroxyalkyl, C<sub>(1-20)</sub>thioalkyl, C<sub>(1-20)</sub>alkylamino, C<sub>(1-20)</sub>alkylaminoalkyl, C<sub>(1-20)</sub>aminoalkyl, C<sub>(1-20)</sub>aminoalkoxyalkenyl, C<sub>(1-20)</sub>aminoalkoxyalkynyl, C<sub>(1-20)</sub>diaminoalkyl, C<sub>(1-20)</sub>triaminoalkyl, C<sub>(1-20)</sub>tetraaminoalkyl, C<sub>(5-15)</sub>aminotrialkoxyamino, C<sub>(1-20)</sub>alkylamido, C<sub>(1-20)</sub>alkylamidoalkyl, C<sub>(1-20)</sub>amidoalkyl, C<sub>(1-20)</sub>acetamidoalkyl, C<sub>(1-20)</sub>alkenyl, C<sub>(1-20)</sub>alkynyl, C<sub>(3-8)</sub>alkoxyl, C<sub>(1-11)</sub>alkoxyalkyl, and C<sub>(1-20)</sub>dialkoxyalkyl; and

— - — - represents a double or single bond;

with the proviso that  $R_1$  is not an  $[\omega-1]$   $\omega-1$ -hydroxyalkyl group having from 5 to 9 carbon atoms [alcohol substituted  $C_{(1-8)}$  alkyl when both X and Y are  $N(R_3)$ , Z is  $C(R_3)$  and  $R_3$  is H or  $C_{(1-3)}$  alkyl] when  $R_3$  is hydrogen or methyl and  $R_4$  is hydrogen.

3. (Amended) The therapeutic compound of claim 1, wherein  $[R_2$  and]  $R_3$  and  $R_4$  are selected from the group consisting of methyl, ethyl, oxo, isopropyl, n-propyl, isobutyl, n-butyl, t-butyl, 2-hydroxyethyl, 3-hydroxypropyl, 3-hydroxy-n-butyl, 2methoxyethyl, 4-methoxy-n-butyl, 5-hydroxyhexyl, 2-bromopropyl, 3-dimethylaminobutyl, 4-chloropentyl, methylamino, aminomethyl, and methylphenyl.

4. (Amended) The therapeutic compound of claim 1, wherein each  $[R_2$  and]  $R_3$  and  $R_4$  is substituted with one or more members of the group consisting of hydroxyl, methyl, carboxyl, furyl, furfuryl, biotinyl, phenyl, naphthyl, amino group, amido group, carbamoyl group, cyano group, sulfo, sulfonyl, sulfinyl, sulfhydryl, sulfeno, sulfanilyl, sulfamyl, sulfamino, phosphino, phosphinyl, phospho, phosphono, N-OH,  $-\text{Si}(\text{CH}_3)_3$ ,  $C_{(1-3)}$ alkyl,  $C_{(1-3)}$ hydroxyalkyl,  $C_{(1-3)}$ thioalkyl,  $C_{(1-3)}$ alkylamino, benzylidihydrocinnamoyl group, benzoyldihydrocinnamido group, optionally substituted heterocyclic group and optionally substituted carbocyclic group.

10. (Amended) A pharmaceutical composition comprising the compound of either claim 1[, 8] or [9] 21 in admixture with a pharmaceutically acceptable carrier, adjuvant or vehicle.

11. (Amended) A method for inhibiting a cellular process or activity mediated by IL-12, the method comprising:

- (a) contacting IL-12 responsive cells with a compound as defined in claim 1[, 8] or [9] 21; and
- (b) determining that the cellular process or activity mediated by IL-12 is inhibited.

16. (Amended) A method for treating a Th1 cell-mediated inflammatory response in a mammal in need of such treatment, the method comprising:

Application No. 09/288,556

administering to the mammal a therapeutically effective amount of the compound defined in either claim 1[, 8] or [9] 21, wherein said compound is capable of inhibiting an IL-12 mediated cellular process or activity, thereby inhibiting the inflammatory response.